

calculating the measure of signal variability as at least one of: kurtosis, variance, skewness or range of the discrete sensor signal values.

16. The method of claim **11** wherein the plurality of subsystems include one or more of a threshing subsystem, a propulsion subsystem, a separating subsystem, a front end equipment subsystem, a material handling subsystem and a residue handling subsystem, and wherein generating the action signals comprises:

controlling the one or more subsystems.

17. An agricultural machine, comprising:

a plurality of different subsystems, each performing a function of the agricultural machine;

a plurality of different sensors each sensing a corresponding variable and generating a sensor signal indicative of the corresponding variable;

a variability identifying component configured to automatically identify a measure of signal variability corresponding to each of the different sensor signals; and

a control system that controls the plurality of different subsystems on the agricultural machine, based on the sensor signals and the identified measure of signal variability.

18. The agricultural machine of claim **17** wherein the variability identifying component comprises:

a deadband identifying system that identifies a deadband corresponding to each sensor signal based on the corresponding measure of signal variability, intermittently, during operation of the agricultural machine, the control system controlling the plurality of different subsystems based on the deadband corresponding to each of the sensor signals.

19. The agricultural machine of claim **18** wherein the deadband identifying system comprises:

a signal characteristic capturing component configured to capture a set of discrete sensor signal values for a given one of the sensor signals over a given time period; and a deadband calculating component configured to calculate a standard deviation of the discrete sensor signal values as the measure of signal variability.

20. The agricultural machine of claim **18** wherein the deadband identifying system comprises:

a signal characteristic capturing component configured to capture a set of discrete sensor signal values for a given one of the sensor signals over a given time period; and a deadband calculating component configured to calculate the measure of signal variability as at least one of: kurtosis, variance, skewness or range of the discrete sensor signal values.

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